

opposite direction. A change in the direction of rotation preferably takes place in connection with a targeted massage of the individual units of meat, but it is possible to change the rotation of the drum 4 at any time during the process.

PATENT CLAIMS

1. A method of thawing one or more frozen blocks of meat (1) having a temperature T_1 , said blocks of meat (1) being composed of units of meat (2) frozen together, characterized in that the frozen blocks of meat (1) are placed in a drum (4) of a massage system (3), said drum (4) comprising carriers (5),
 - that liquid (6) having a temperature T_2 is supplied in the interior of the carriers (5), said temperature being higher than T_1 , said supply generating a temperature T_3 on the surface of the carriers (5), said temperature T_3 being higher than T_1 , and
 - that brine having a temperature T_4 is supplied to the drum (4), said temperature T_4 being higher than T_1 .
2. A method according to claim 1, characterized in that the brine is supplied to the drum (4) under establishment of a vacuum.
3. A method according to claim 1 or 2, characterized in that the drum (4) rotates/revolves, said movement causing the blocks of meat (1) and the brine to get into physical contact with the heated carriers (5).
4. A method according to any one of the preceding claims, characterized in that the drum (4) rotates/revolves, said movement establishing a supply of heat to the frozen blocks of meat (1) and to the brine, and causing the individual frozen blocks of meat (1) to be broken up into several and separate units of meat (2).
5. A method according to any one of the preceding claims, characterized in that the difference between T_1 and T_4 is 2 – 4 °C.

6. A method according to any one of the preceding claims, characterized in that T_2 is in the range 10 – 40 °C.

5 7. A method according to any one of the preceding claims, characterized in that T_4 is lower than or equal to T_2 , said optional difference being 1 – 2 °C.

10 8. A method according to any one of the preceding claims, characterized in that T_3 is lower than or equal to T_2 , said difference being 1 – 2 °C.

10 9. A method according to any one of the preceding claims, characterized in that the liquid (6) supplied to the carriers (5) is preferably water.

15 10. A method according to any one of the preceding claims, characterized in that a negative pressure is established in the drum (4) during its treatment of the blocks of meat (1) and/or the units of meat (2).

20 11. A method according to any one of the preceding claims, characterized in that the drum (4) continues its rotation/revolution after the blocks of meat (1) having been broken up into units of meat (2).

25 12. A method according to any one of the preceding claims, characterized in that the carriers (5) are constructed asymmetrically, and that, during rotation, the drum (4) changes its direction of revolution, whereby the blocks of meat (1) and/or the units of meat (2) are caused to contact changing sides of the same carriers (5).

13. Use of a method according to claims 1 – 12 for the thawing of frozen meat.

30 14. A system for carrying out the method according to claims 1 – 13,

characterized by a massage system (3) comprising a drum (4); at least one carrier (5); a chamber for providing a negative pressure, preferably by means of a pump; and a system for recirculating a liquid (6) between the interior of the carriers (5) and a heat reservoir.

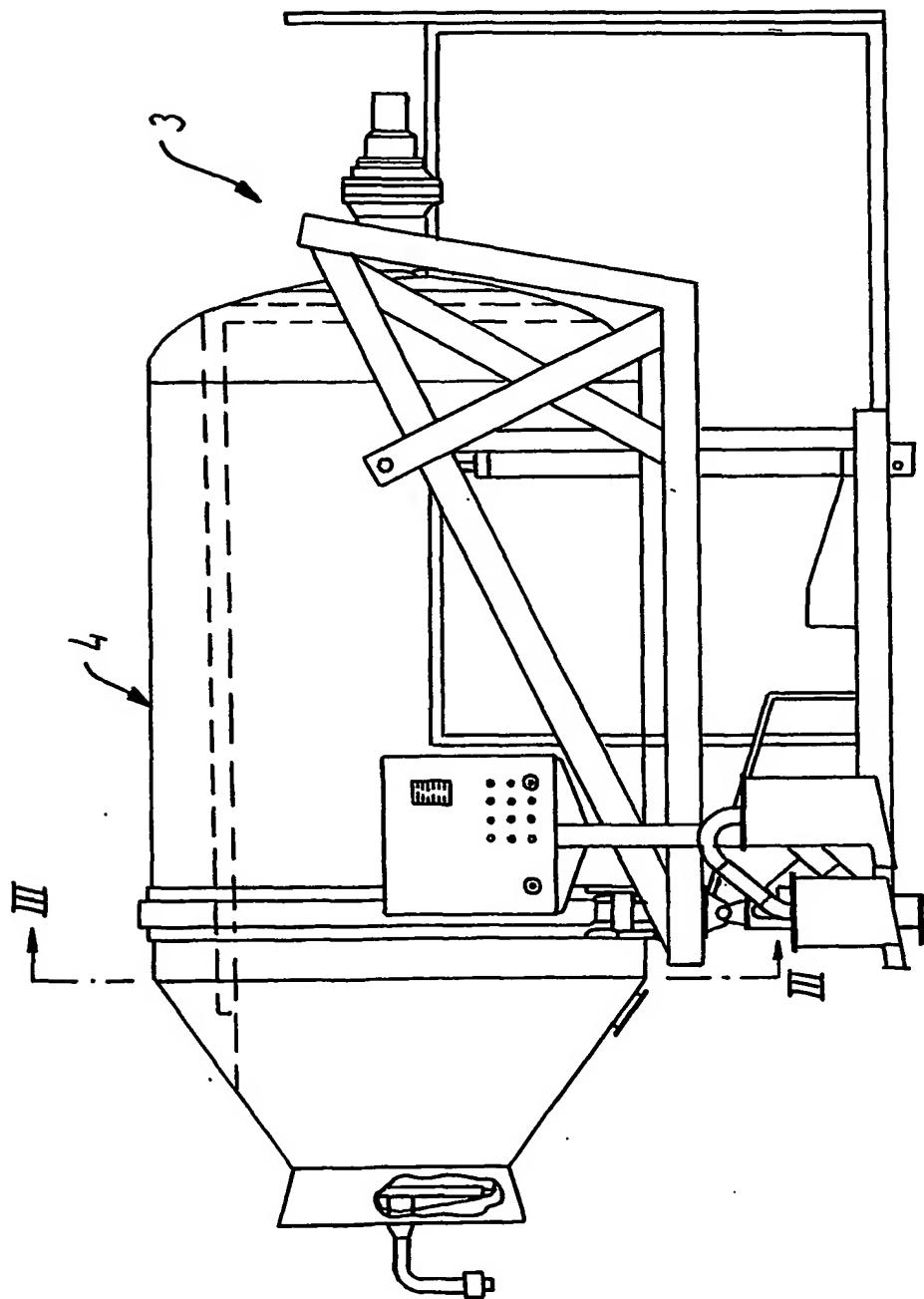


FIG. 1

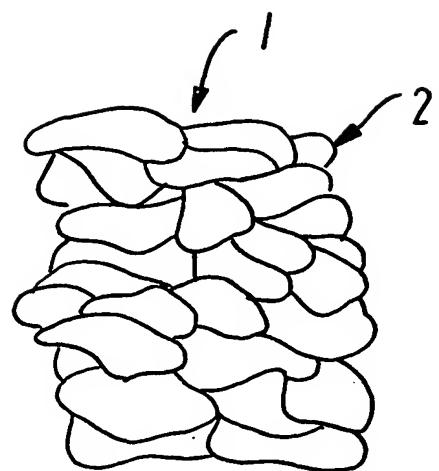


FIG. 2

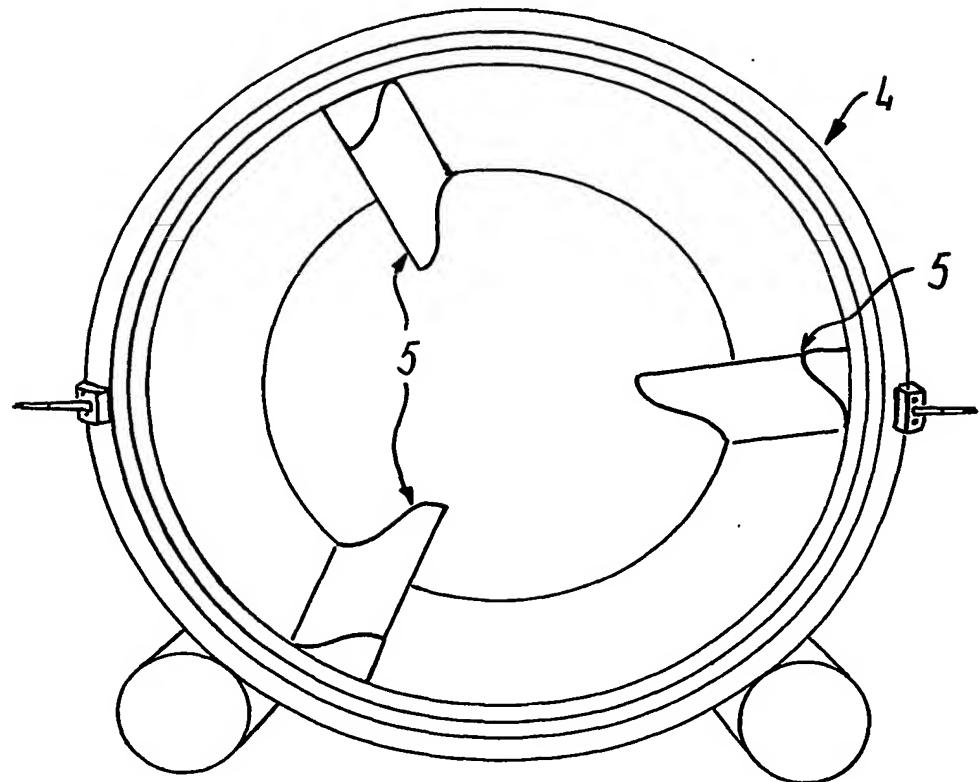
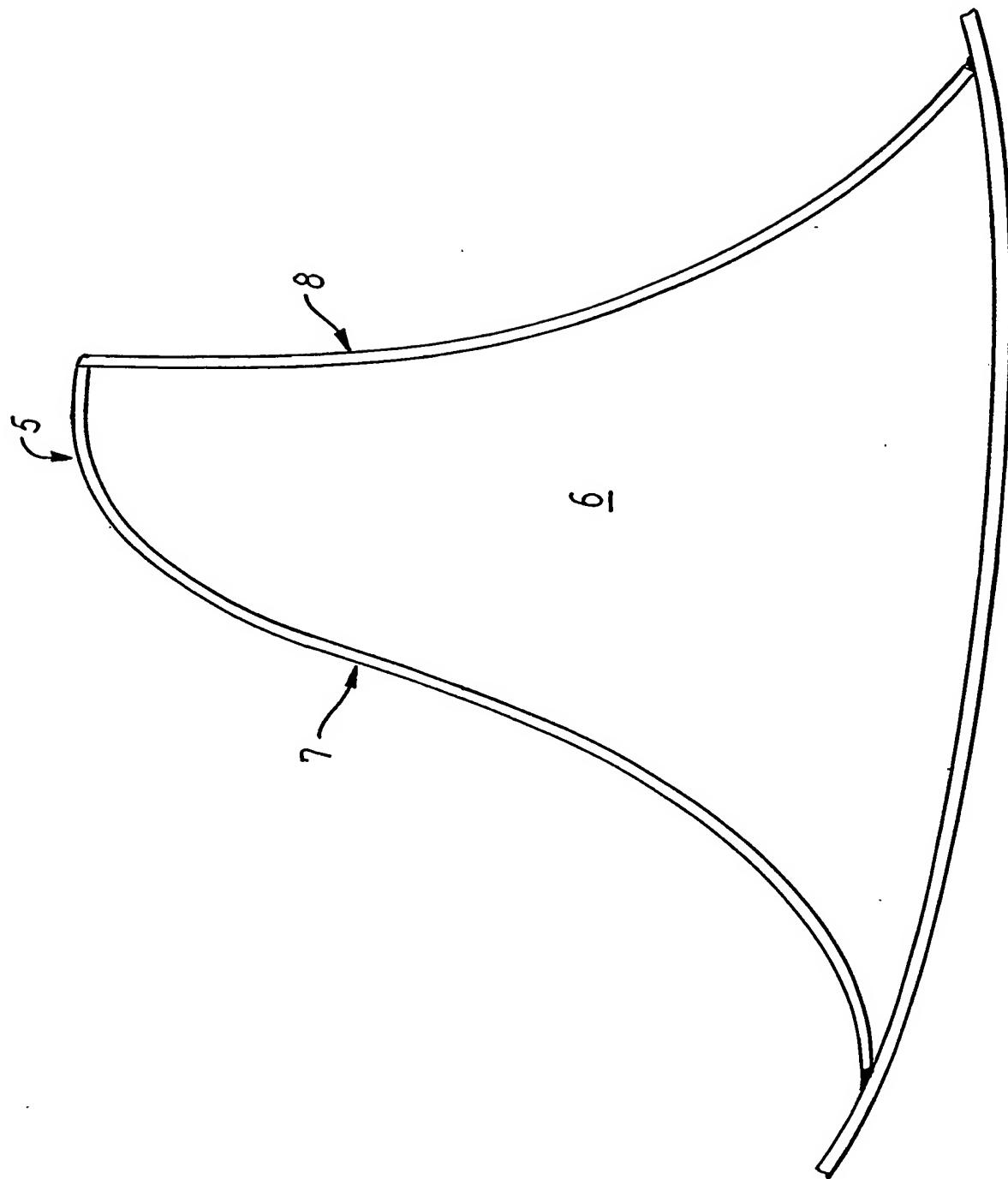


FIG. 3

F/G.4



INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK 02/00673

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A23B4/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23B A23L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | EP 0 574 327 A (JAEGER PARTICIPATIONS SA) 15 December 1993 (1993-12-15) column 1, line 1-3 column 2, line 29-33 column 3, line 14-17; figure 2 ---- | 1-14 |
| A | US 3 402 053 A (LONGE PATRICK J ET AL) 17 September 1968 (1968-09-17) column 2, line 26-50; claim 1 ---- | 1-14 |
| A | FR 2 711 485 A (ARMOR INOX SA) 5 May 1995 (1995-05-05) the whole document ----- | 1-14 |

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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